Integrated Ashing and Implant Annealing Method

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ABSTRACT

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After ion implantation, thermal ashing is conducted in a high oxygen concentration at a pressure of between about 100 to about 760 Torr at below 700°C to remove the resist. Since photoresist consists of Carbon (C), Hydrogen (H) and Oxygen (O), the products of reaction of the thermal oxidation of the photoresist include CO₂ and H₂O. Since the process includes a substantial amount of oxygen, the resist can be completely oxidized, thus leaving no residue or other contaminates to remain on the substrate.